

CLAIMS

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What is claimed is:

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1. An implantable drug-delivering medical device for implantation into a recipient, said device comprising:

an implantable medical device,

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a film adhered to said device, said film comprising an in vivo biocompatible and biodegradable or bioabsorbable or bioerodable polymer, said film further comprising a desired dosage amount of one or more predetermined drugs,

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wherein the desired dosage amount of said one or more predetermined drugs is selected based on particular dosage requirements of said recipient and wherein said film is adhered to said medical device immediately prior to implantation of said medical device into said recipient.

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2. The device of claim 1 wherein said polymer comprises alginates.

3. The device of claim 2 wherein said alginates comprise sodium alginate.

4. The device of claim 3 where in said sodium alginate is present in the range of about 1 wt.% to about 8 wt.% and has a molecular weight in the range of 12,000 to 190,000.

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5. The device of claim 1 wherein said polymer comprises hydrogels.

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6. The device of claim 1 wherein said implantable medical device comprises a stent.

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7. The device of claim 1 wherein said implantable medical device comprises at least one of pacemaker, vascular graft, suture ring, implantable infusion port, implantable drug delivery pump, orthopedic hardware and appliances, and, neurological stimulating device.

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8. The device of claim 1 wherein said film is sterile.

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9. The device of claim 1 wherein said film is formed in the presence of a cross-linking agent.

10. The device of claim 9 wherein said cross-linking agent comprises at least one of calcium chloride, CaSO_4 , MgCl , MgSO_4 , and barium compounds.

11. The device of claim 10 wherein said cross-linking agent comprises calcium chloride.

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12. The device of claim 1 wherein said film exhibits elasticity in an amount greater than 200%.

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13. The device of claim 1 wherein said film is adhered to said device in a uniform thickness or in a non-uniform thickness.

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14. The device of claim 1 wherein said polymer comprises polyethylene glycol or derivatives and copolymers of polyethylene glycol.

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15. The device of claim 5 wherein said hydrogels comprises a mixture of polyethylene oxide and polyethylene glycol.

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16. The device of claim 1 wherein said one or more predetermined drugs are at least one of water soluble drugs and non-water soluble drugs.

17. An implantable drug-delivering medical device for implantation into a recipient, said device comprising:

an implantable medical device,

5 a film adhered to said device, said film comprising sodium alginate, said film further comprising a desired dosage amount of one or more predetermined drugs,

10 wherein the desired dosage amount of said one or more predetermined drugs is selected based on particular dosage requirements of said recipient and wherein said film is adhered to said medical device immediately prior to implantation of said medical device into said recipient.

18. The device of claim 17 wherein said implantable medical device comprises a stent.

19. An implantable drug-delivering medical device for implantation into a recipient, said device comprising:

an implantable medical device,

20 a film adhered to said device, said film comprising sodium alginate cross linked with calcium chloride, said film further comprising a desired dosage amount of one or more predetermined drugs,

25 wherein the desired dosage amount of said one or more predetermined drugs is selected based on particular dosage requirements of said recipient and wherein said film is adhered to said medical device immediately prior to implantation of said medical device into said recipient.

claim 1